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Structure and Light: Recent Developments in Contemporary Art

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STRUCTURE AND LIGHT:
RECENT DEVELOPMENTS IN CONTEMPORARY ART

by

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This thesis submitted by William Landwehr in partial fulfillment of the requirements for the Degree of Master of Arts from the University of North Dakota is hereby approved by the Faculty Advisory Committee under whom the work has been done.

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ABSTRACT

This thesis is an introduction to a recent development in the visual arts. The art of light and structure and its inherent implications have so thoroughly captured the imagination of a new generation of artists that it is rapidly becoming the major artistic force of our century.

The thesis concentrates on the background, the theory, and some of the implications of these developments. It is highly biased and to the fullest extent concerns itself with the personal orientation I have committed myself to in the creation of my own art. It involves itself with discussions of my aesthetic philosophy as well as the influences and mechanics which contribute to the creation of my individual visual statement.

Purposefully, the concepts contained in the thesis will reinforce my belief that the phenomenon of light and structure will continue to be a principal compulsion in the plastic arts.

As with any document conceived in the middle of a rapidly evolving, highly sophisticated environment, it is expected to be topical and incomplete. It has been written, by a participant in the midst of a young activity. Within this obvious limitation it attempts to be a demanding and meaningful stimulus to those who read it.

INTRODUCTION

> A maze of amazement, a carnival of thrills . . . light, motion, dematerializations. Be hypnotized by strobe lights flashing on and off onto whirling disks. Enter a black room, step on a switch that turns on a light that projects your shadow on a large white screen; move away, but your shadow stays imprisoned; watch it slowly fade away or be erased by smoky, seaweed wisps of pastel light. Figure out the secret code of a tall blue light. Play with T.V. sets.[1]

The preceding sensations could have been induced by a variety of man's inventions and devices: the flashing marquee over the old Majestic theater, the pulsating rhythm of an I.B.M. computer flashing the fortunes of corporations and executives, or the signaling control center of a mechanized human being bent upon eliminating all traces of evil and corruption. But this description is rather of one man's reactions to an art exhibition entitled "Lights in Orbit."[2]

"Art today, to the extent that it exists, has no boundaries."[3] Contemporary attitudes no longer compel the artist to restrict his imagery

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[1]John Perreault, "Maze of Amazement," The Village Voice, February 16, 1967, p. 10.

[2]Shown at the Howard Wise Gallery, New York, February 4 through March 4, 1967.

[3]John Perreault, "No Boundaries," The Village Voice, March 16, 1967, p. 10.

within the confines of the acceptable. What art is and what it isn't always has been an individual and controversial issue. Today that issue is being stretched, warped and challenged perhaps more than in any other period of history.

There were times when one could be reasonably sure that a painting was a painting, a sculpture a sculpture and a movie a sequence of film. Today media are being relentlessly mixed.

An increasing number of dimensional constructions could be either paintings or sculptures, depending on one's point of view. This mixing of media is particularly prominent in the new directions of light art and kinetic art.

The artist-technician of today no longer denies the contributions being made in the fields of optics, electronics, or photography. Rather he is confidently aware that the continuing strides being made by industrial research will allow him opportunities to create objects and environments of even greater sophistication. It should have been expected in a society that is engrossed in technology and materialism that the extensive exploring among American artists would produce new and unexpected visual forms.

It is therefore not inconceivable that the art of light and structure and its inherent implications are rapidly becoming the major aesthetic force of our century.

Light in and of itself has certain qualities that attract artists as

well as spectators. The speed of light, its ability to expand, and the mystical qualities of energy it possesses help to account for its fascination.[1]

Sources of stimulation for the artist are many and varied:

> Our cities are cities of light. Our information about the world is for the most part produced directly into our brains by T.V. wave lengths of light. Our lives have become so complicated and high-speed and our environment so electronic that traditional art media sometimes seem incapable of the icons and the similies and the aesthetic and sensuous stimulation that we crave to tune-up our senses and nourish our vision.[2]

Whatever the source--sun, fire or electricity--all art depends on light for lighting. It is, however, curious and fascinating to concern ourselves with the growing number of artists whose major concern today is neither light as lighting, nor the representation of light, but the articulation of light itself.

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[1]Nan R. Piene, "Light Art," Art in America, May-June, 1967, pp. 46-47.

[2]Perreault, "Maze of Amazement," p. 10.

CHAPTER I

LIGHT AS AN AESTHETIC ELEMENT

The Beginnings of Luminism

> The light artists of today, some of whom began using light in the 1950's and some of whom began employing light one, two or three years ago, owe almost nothing to the handful of individuals who earlier in the century either made or dreamed of making creative works with light. That is, there seems to be no particular historical development based on knowledge of previous work, as there is in the history of modern painting.[1]

"Luminism,"[2] according to Willoughby Sharp, "was born on St. Thomas Day, December 21, 1734,"[3] when a French Jesuit philosopher and mathematician Father Louis Bertrand Castel (1688-1757), demonstrated his "Clevessin Oculaire," the world's first color organ. The keyboard of Castel's five octave harpsicord was linked to a set of transparent colored tapes which were illuminated by candlelight.

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[1] Piene, "Light Art," p. 26.

[2] Luminism is used by American historian Willoughby Sharp to describe the movement of light art in the catalog of the Light/Motion/Space exhibition organized by the Walker Art Center, Minneapolis in 1967. Mr. Sharp is also credited with coining the word Kineticism used to describe the "movement movement" in 1964.

[3] Willoughby Sharp, "Luminism: Notes Toward an Understanding of Light Art," Light/Motion/Space (Minneapolis: Walker Art Center, 1967), p. 4.

In 1844, D. D. Jameson suggested a new color organ in his pamphlet, "Color-Music," published some years after Father Castel's manuscript, "La Musique en Couleurs" in 1720. In Jameson's visual environment sound was combined with light controlled by mechanical shutters projected through glass containers of colored liquid set into the walls of a room lined with tin plates.[1]

Additional investigation by these and other visionaries continued to center around the relationship between musical notes and varying colored light formations.

Frederic Kastner (1852-82) is credited with the invention of "Pyropone," a color organ employing hydrogen-filled glass tubes, around 1870. Others, including the American painter, Bainbridge Bishop, and Alexander Wallace Rimington (1854-1919), an art professor at Queen's College, London, made similar devices. Bishop designed a color organ which projected, first by daylight and then by arclight, mixed colors onto a screen. Rimington, using an organ and arc lights, projected a "fidgety flicker" of color onto a large white curtain. Musically, different notes were arbitrarily assigned to different colors, his organ, however was soundless, the melody being performed simultaneously on a conventional organ.

Russian composer Alexander Scriabin (1872-1915), an advocate

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[1] Ibid., p. 4.

of "total theatre," included a light keyboard in the performance of his symphony, "Prometheus, the Poem of Fire," at Carnegie Hall in 1915. In attempting to synthesize sound, light and theatre Scriabin commissioned an electrical company to supply a large Rimington-like color organ that projected colored lights onto a screen onstage. The effect was unimpressive, and Scriabin died several months later, leaving much of his work unrealized.

In 1921 Thomas Wilfred (1889-) completed his first "Clavilux," a totally new and abstract medium completely independent of music. In 1930 he established the Art Institute of Light and presently devotes himself to what he calls the "art of lumia." The Museum of Modern Art in New York purchased his first lumia composition and instrument in 1924 and has since acquired additional works including his latest, "Lumia Suite, Opus 158," in 1964.[1]

"Many of the most important contributions to Luminism in the 1920's derived from the experimental work done at the Weimar Bauhaus."[2] In the years 1922-1930 an instrumental Bauhaus figure, Laszlo Moholy-Nagy (1878-1946), created a work of major importance, the "Light Display Machine." In describing his polished metal and plastic contribution he writes:

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[1]For an illustration of this see Nan R. Piene, "Light Art," Art in America, May-June, 1967, p. 28.

[2]Sharp, "Luminism," p. 6.

> This moving sculpture had 140 light bulbs connected with a drum contact. This was arranged so that within a two-minute turning period, various colored and colorless spotlights were switched on, creating a light display on the inside walls of a cube.[1]

Other Bauhaus figures, including Ludwig Hirschfeld-Mack (1893-1964), Joseph Hartwig (1880-1955) and Kurt Schwerdfteger (1897-) developed their concept of the "Reflektorische Farblichtspiel." Hirschfeld-Mack describes their initial inspirations:

> Originally we had planned a quite simple shadow show for a Lantern Festival. Accidently, through the replacement of one of the acetylene lamps, the shadows on the transparent paper screen doubled themselves, and because of the many differently coloured acetylene flames, a 'cold' and 'warm' shadow became visible. Immediately, the thought came to mind to double the source of light, or even to increase them six-fold and to put colored glass in front of them.[2]

Fire then presents itself as a medium with aesthetic potential. "Four artists working in Paris and an American have done important works with fire."[3] In 1957 Yves Klein (1928-62) and Takis, a Greek working in Paris, almost simultaneously made use of fire in an aesthetic sense. Klein's work consisted of a large monochromatic

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[1] Vision in Motion, Laszlo Moholy-Nagy (Chicago: P. Theobald, 1947), quoted in Willoughby Sharp, Light/Motion/Space (Minneapolis: Walker Art Center, 1967), p. 6.

[2] Willoughby Sharp, Light/Motion/Space (Minneapolis: Walker Art Center, 1967), p. 6, quoting "The Reflected Light Compositions of Ludwig-Hirschfeld-Mack," Form (London: September 1, 1966), pp. 10-11.

[3] Sharp, "Luminism," p. 7.

blue panel superimposed with rows of Bengal lights. When ignited, the flames, reflecting the background, gave off an omniscient glow. Takis used explosives attached to wavering metal rods to fling intervals of flame into public courtyards and gardens.[1]

In 1960 Jean Tinguely created an environmental assemblage, "Homage to New York," in the garden of the Museum of Modern Art. Once the assortment of props, including tires, bicycle wheels and broken planks had been assembled, Tinguely proceeded to set them afire, promptly consuming his efforts in flame.

French artist Bernard Aubertin and American John van Saun are also intrigued by the mystic qualities of smoke and fire. In 1963 Aubertin invented "Red Cage of Smoke," a perforated metal box containing two electric lights which he describes in "The Manifesto of my Pyromaniacal Activity" (1962):

> First, I turn on the two red lights. Then, I open the top and place the smoke powder on the point of a nail in the inside of the box. I light the smoke powder and close the cover. Soon, the smoke leaves the box through the perforations and crosses the rays of red light accompanied by the sound of the burning powder. A strong smell fills the space. The powder stops burning. Silence. Inside the box, visible through the holes, brilliant red and orange smoke smolders.[2]

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[1] Takis calls his fireworks, "Signals." In April 1967, I titled the first in a continuing series of light structures "Love Signal." At the time I was completely unaware of Takis' efforts.

[2] Sharp, "Luminism," p. 8.

Van Saun has also worked with various inflammable materials as well as electric light. In describing his purposes he writes: "In my Light Boxes I try to capture the pure essence of electric light. In my Fire Works I try to capture the essence of life itself."[1]

Light-Giving and Light-Receiving Sculptures

THREE LAMP EVENTS

- on.
  off.

- lamp

- off. on.[2]

George Brecht, an artist concerned with another recent development, Happenings, uses a small card with a few words such as the ones above to arrange an event. His proposition in "Three Lamp Events" suggests an increased awareness of the inherent beauty of electric light as both a medium and a message.

I hesitate using the word "sculpture" to describe the efforts of present-day artists using light as their primary conveyance. As I have previously pointed out, various media, in many instances, have been inter-changed, inter-related, and to a certain degree abolished.

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[1] Ibid., p. 8.

[2] Allan Kapprow, Assemblages, Environments and Happenings (New York: Harry N. Abrams, n.d.), p. 173.

"Painting has become sculpture, sculpture environment . . ."[1] American artist Dan Flavin states flatly, ". . . my own proposal has become mainly an indoor routine of placing strips of fluorescent light. It has been mislabeled sculpture by people who should know better."[2] The word "sculpture" is used then for lack of a better word.

A number of artists have used light directly to achieve a variety of aesthetic aspirations. American artist James Davis (1901-) is a pioneer light advocate who has been involved with its effects for over twenty-five years. His works, incorporating paint on transparent plastic sheets, photographs of moving light constructions and motion pictures capturing abstract light movements were all a logical development of his paintings on canvas.[3]

Len Lye (1901-), a New Zealander by birth and now an American, makes motor-driven stainless steel sculptures that catch reflections of light as they revolve. Heinz Mack (1931-), a German born member of the Zero Group,[4] first made constructions of plastic, mirrors and aluminum intended to send and receive light. His recent light box

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[1]Perreault, "No Boundaries," p. 10.

[2]Dan Flavin, "some remarks . . . excerpts from a spleenish journal," Artforum, December, 1966, p. 27.

[3]A more detailed discussion of Davis' work may be found in Art in America, November-December, 1967, pp. 64-69.

[4]Avant Garde group which seeked to link itself with science and technology. Founded in Dusseldorf, Germany in 1958 by Otto Pine and Heinz Mack.

"sculptures" are more directly involved with electric light effects.

It is valuable to briefly examine the work of several artists who are currently making some of the most sophisticated and exotic light "sculptures."

Among them, west coast artist Dan Flavin makes some of the most elegant and unusual objects by combining fluorescent tubes in varied elemental straight-line arrangements. Using white and colored fluorescent tubes in commercially available widths and varying lengths he makes what he describes as "image-objects." Flavin, an outspoken and eloquent writer comments about his work, stating:

> I know now that I can reiterate any part of my fluorescent light system as adequate. Elements of parts of that system simply alter in situation installation. They lack the look of a history. I sense no stylistic or structural development of any significance within my proposal--only shifts in partitive emphasis--modifying and addable without intrinsic chance.[1]

In Chryssa's neon sculptures, measure and control are best exemplified in her recent monochromatic fragments of the alphabet. Within the confines of subtle gray Plexiglas boxes she repeats a careful analysis of a letter precisely and suggestively. Her most ambitious effort "The Gates to Times Square," done in 1966, is a monumental homage to the neon jungle of our commercial world. She makes a revealing statement about her sensibilities in writing:

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[1]Flavin, "some remarks . . . ," p. 27.

> I am afraid that all these human patterns and habits, all this garbage, interferes with the creative process, so I try to leave as much of it out as I can. The less I am in love with 'nature' and 'people,' the clearer my work becomes.[1]

Billy Apple, another neonist of considerable stature, uses an exotic range of color (turquoise, pink, lemon yellow, Apple green, orchard--sometimes in the same piece) to create the shapes of kites, pinwheels and other assorted whirligigs that he calls U.F.O.'s or Unidentified Fluorescent Objects. Apple has devised a method of supporting his structures by attaching them to the ceiling in such a way that they appear to be floating in mid-air. A poster announcing a recent exhibition pacified prospective collectors, stating, ". . . just in case you're worried about one of them conking out on you, we've thrown in a tempting 6 month guarantee. (This must make Billy Apple's U.F.O.'s the world's first 'guaranteed art.')."

Greek-born Stephen Antonakos works with neon using a totally non-objective approach. In a wall sculpture, "White Hanging Neon," narrow loops of neon tubes, extend down and others at the top thrust diagonally outward from a square aluminum base. The tubes switch on and off in long cycles of white and yellow neon. Anatonakos says he wants to create "the shock of the unexpected" through "silent screens

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[1] Gordon Brown, "The Cool Mind: Notes on Neon From Chryssa," Arts Magazine, March, 1968, p. 40.

of color."[1]

Other artists are currently exploiting different aspects of light: Ben Berns, a New Yorker, combines plywood- or Formica-covered structures with simplified neon units. Howard Jones' polished aluminum panels reflect the blinking of carefully programmed lights. Preston McClanahan surrounds fluorescent light shafts with intricate Plexiglas constructions. Boyd Mefferd, a young artist now living in South Dakota, programs light boxes in series and multiple units. Victor Millonzi, an American, works with neon in direct free standing sculptures. Nam June Paik, a native of Korea, uses standard American television sets to create everchanging optical patterns reminiscent of visual hallucinations and Martial Raysse, a Frenchman now living in New York, creates "pop" momuments using neon much like a commercial sign to outline or emphasize certain objects in his paintings.

The contemporary artists discussed all share a similar interest in pure, reduced forms and the straight-forward use of a lighting element--the light source itself.

Another group of artists are emphasizing a more mystical quality utilizing blinking geometric patterns, various reflections of vague shifting hazes, and some of the more mechanical aspects of Op Art. Much of this work, although more complicated technically than the

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[1]Sharp, "Luminism," p. 9.

neons or fluorescents, tends to be more susceptible to a kind of gimmickry that makes them little more than clever inventions. Exceptions are borne out in the work of such artists as Julio La Parc who plays light games with a remarkable degree of directness and precision. Otto Piene, another member of the Zero Group, showed a highly polished aluminum globe covered with 170 neon light bulbs that blinked at varied intervals in the "Light/Motion/Space" exhibition at the Walker Art Center in 1967;[1] and Gerald Oster is a professor of Chemistry at the Polytechnic Institute of Brooklyn whose "Op" constructions emphasize a strong visual content as opposed to the gadgetry present in other works.

"If the most interesting thing about a work is the fact that it lights up or moves, then the work itself is only a demonstration, and its lighting up or moving merely curious."[2]

Environments and Performances

"In recent years a number of artists have found light to be a convenient tool for creating environments; others, almost conversely, have found the creation of environments to be a natural out-growth of working

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[1]The exhibition "Light/Motion/Space" was organized by the Walker Art Center, Minneapolis and shown in that museum April 8 through May 21, 1967 and subsequently at the Milwaukee Art Center, June 24 through July 30, 1967.

[2]Elizabeth C. Baker, "The Light Brigade," Art News, March, 1967, pp. 65-66.

with light."[1]

The advent of the electric age has, in itself, created a totally new environment. Naum Gabo (1890-) appears to be the first artist to realize that modern technology provided electric light in sufficient strength to restructure this environment.[2] Although his proposal to create "Light Festival" was never carried out, his drawing from 1929 indicates how Gabo proposed to illuminate a Berlin architectural site.

Lucio Fontana (1899-) was the first to use artificial light in a totally enclosed environment or what he preferred to call "spatial ambiances" or "spatial decorations." In Milan in 1952 Fontana suspended more than 900 feet of neon tubing from the ceiling in an attempt to activate an entire space. He has continued to use neon in several subsequent spatial ambiances using as much as 6,000 feet of green tubing in a pavilion stairwell at Turin in 1961.

In a 1961 retrospective at the Museum Haus Lange in Germany Yves Klein presented a small vacant white room to which he added white fluorescent light.

Dan Flavin created a related effect with "greens crossing greens" (to Piet Mondrian who lacked green), an environment he made for a light exhibition in Holland in 1966. His arrangement consisted of two

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[1] Piene, "Light Art," p. 39.

[2] Sharp, "Luminism," p. 6.

channels of green fluorescent tubes encompassed with frosted translucent plastic set at different heights in an otherwise empty room.[1]

In the same exhibition a number of other artists built room environments using completely different concepts. Dutch artist Henk Peters suspended bins of water which, when swayed, reflected movement on an overhead screen of light.

David Boriani, a member of the Italian group called Gruppo T, lined the walls of a darkened room with mirrors and triggered the floor with step-on contacts that allowed the viewer to play visual games with lights located in the ceiling.

Otto Piene, a founder of Group Zero in Dusseldorf, has been responsible for a number of light environments. Along with Heinz Mack he created "Light Ballet" in 1959. In describing his efforts Piene states:

> At first I used hand-operated lamps whose light I directed through the stencils I had used for the stencil paintings. Controlled by my hands the light appeared in manifold projections around the entire rooms . . .[2]

Another group, USCO,[3] created a startling environment for the Light/Motion/Space exhibition at the Walker Art Center in 1967. The

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[1]A color illustration of this piece can be found in "Light Art," Nan R. Piene, Art in America, May-June, 1967, p. 24.

[2]Sharp, "Luminism," p. 7.

[3]USCO is a group of poets, film-makers, artists and engineers working together since 1963.

piece, called "Strobe Environment," engulfed the viewer in strobe light reflections bounding back and forth from strips of mylar hung in a circular pattern from the ceiling.

In 1966 German Artist Gunther Uecker filled a room with suspended aluminum rods containing fluorescent tubes. The rods emitted varying sequences of lights through slits and openings cut into the polished metal.

Robert Whitman, a young American artist known primarily as a creator of "threatre pieces" and Happenings, devised two abstract environments for an exhibition "6 artists 6 exhibitions" at the Walker Art Center in 1968. Upon entering a darkened room the spectator is subtly made aware of a thin red line produced by a neon laser beam that distributes a pure pulsating light on the surrounding walls. Projected above the eye level of the viewer, the beam erases and regenerates itself with great precision.

Other artists are using projected light in a variety of ways. A number of them are involved with theater and electronic music groups. Composer John Cage has projected films on all surfaces of a room during a music-dance-poetry reading concert. Allan Kapprow and others have projected slides and lights in the context of Happenings. Robert Rauschenberg has used flashlights and other light producing devices in his theatre pieces. And Andy Warhol's electronic rock group, The Velvet Underground, has used films of group members, plus changing color

slides with all-over designs, strobe lights and pulsating spotlights in performances at his New York nightclub, the Exploding Plastic Inevitable.

The use of light as a medium in art is still in its infancy, as evidenced by the many technical breakdowns and interruptions in its machines or performances. Its beginnings, however, are substantial enough to warrant the serious consideration of Light Art as a major means of artistic expression in the late twentieth century.

CHAPTER II

ASPECTS OF STRUCTURE

Assemblage, Collage and Construction

> The painting can no longer be a recessive flat object on the wall, something to put over the mantel or over the sofa, part of the interior decoration. The work of art now insists on its presence in the room in a way which makes it the psychological equal of the people present; it must be taken into account, and it must participate dynamically in the feeling and interaction of those in the room. It 'is' one of 'them.'[1]

Modern collage began with Braque and Picasso, two of Cubism's most creative personalities in the period 1908-14.[2] It was in this period that the new medium received the general name 'collage' meaning to paste or glue, and the more specific one 'paper colle.'

Picasso's "Still Life with Chair Caning" (1911-12), incorporated a piece of oilcloth representing chair caning into the structure of a traditional Cubist oil painting. Braque's "Fruit Bowl (Compotier)," done in 1912, integrated pasted strips of wallpaper with a charcoal

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[1] Ugo Mulas and Alan Solomon, New York: The New Art Scene (New York: Holt, Rinehart and Winston, 1967), p. 33.

[2] A complete discussion of the events surrounding the inception of collage can be found in, Collage: Personalities, Concepts, Techniques by Rudi Blesh and Harriet Janis (New York: Chilton Company, 1962), pp. 9-14.

drawing of grapes, a goblet and the suggestion of a compote dish.

By 1912 Braque and Picasso were making consistent use of collage as a major means of expression. Shortly after Juan Gris adopted a similar approach using materials typical of all three artists: news clippings, grained and textured papers and patterned wallpapers.

Once collage had been popularized as a legitimate medium by the Cubists, other movements began to utilize it. Futurism, the Italian movement that was Cubism's chief rival in the same period, was among the earliest to use it. Carra, Boccioni, Severini, Balla and Prampolini integrated common collage elements along with unorthodox materials in their attempts to blend art and life.

The artists of the Dada movement also made substantial use of the collage technique. Jean Arp, a leader of Dada in Zurich, made numerous collages which over a period of time became so pronounced that they fell into the realm of the bas-relief or sculpture. Picabia, Duchamp, Van Doesburg, Grosz and Man-Ray all contributed to Dadaist activity in collage. The madness and spontaneity of Dada was exactly the movement that allowed the cutting, gluing and patching together of hundreds of disparate fragments into a meaningful synthesis.

A heroic figure in the development of the new art was German artist Kurt Schwitters who produced a vast number of collages from 1919 until his death in 1948. He collected materials from sidewalks, waste-baskets and trash heaps to paste into the pictures that developed collage

into an art medium that was important enough in its own right to rival painting. In 1920, after having worked with collage for a year, Schwitters wrote:

> When I adjust materials of different kinds to one another, I have taken a step in advance of mere oil painting, for in addition to playing off color against color, line against line, form against form, etc., I play off material against material for example wood against sackcloth.[1]

In this first year Schwitters discovered a monosyllable without previous meaning which he used to designate his collages calling them "Merz" pictures and then extended this term to his poetry and finally to all of his activities. This strange little word, taken from the German "Kommerz" meaning commerce, has become a mystical association with a world that was a way of life for Schwitters.

Another group of artists to use the technique of collage was the Surrealist movement which had its formal beginnings in the writings of Andre Breton in 1924. The use of collage gave artists like Dali, Picabia, Miro and Tanguy an appealing element to enhance the dream-like feeling of their work. Surrealism also led to the development of new ideas and techniques related to the collage theory, including an interest in the making of objects.

One of the most original collage artists was painter Max Ernst, who invented new techniques and a new type of collage. Passing up

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[1] Rudi Blesh and Harriet Janis, Collage: Personalities, Concepts, Techniques (New York: Chilton Company, 1962), pp. 60-61.

the scraps of litter and assorted bits of waste that intrigued Schwitters, Ernst clipped illustrations, photographs and drawings from books and catalogues. By manipulating and assembling different steel engravings Ernst was able to produce a new and complete picture which he called print-collages.

Collage has continued to be a major medium and either as a device or as a primary means has been used by numerous artists. The debris and confetti of city life continues to leave a multitude of materials, objects and ideas for artists to exploit for a permanent record of man's wastefulness.

Assemblage and Construction

Assemblage and construction, although separate in definition, are combined here as expanded forms of collage. Construction is basically a process or manner of building, usually in a systematic and sometimes pre-planned order. Assemblage, a form of construction, uses elements not normally intended as art materials combined in a manner which is predominantly assembled rather than drawn, painted, modeled or carved.

By 1912 or 1913, collage had significantly disturbed the classical tradition of the conventional flat picture plane. Although most collages had only slight additions of textured paper neatly pasted down, this innovation was enough to provoke a response requiring a

revaluation of painting procedure.

The Cubist constructions and later the Dada and Surrealist modifications predicted a certain break with painting without becoming sculpture, although painting was clearly the dominant medium of the time.

The idea of construction was also developing in czarist Russia as early as 1913. In Moscow, Vladimir Tatlin made relief constructions that gradually moved out of the picture into elaborate structures requiring guy wires for support. The work of Malecvich and Rodchenko, like that of Tatlin, is severe and serious and highly geometrical. Another Russian, Nahum Gabo, began working with constructions in 1915 by building a head of cardboard. Gabo and his brother Antoine Pevsner, working in neutral Norway during the war years 1914 to 1917, continued to make constructions of various materials including plywood; and for the first time Gabo pioneered the use of welding, a technique that in time has revolutionized modern sculpture.

The Dutch De Stiji movement organized in Leyden in 1917 by painters Theo van Doesburg and Piet Mondrian, sculptor Georges Vantongerloo, a poet and several architects, was based on an interest in architecture. Although artists like Mondrian did paintings similar to collages, it was not until some years later that Domela made relief constructions with free-standing grids set in front of the picture plane.

Alexander Archipenko, one of the cubist sculptors, had worked

with versions of collage before his life-size sculpture "Woman before Mirror," which Archipenko chose to call an "assemblage." Made of metal, wood and mirrors, it could have been described as a sculpture or a construction.

The use of actual materials in collages, constructions and assemblages is imbedded in much of contemporary painting. Robert Rauschenberg's combine-paintings of the late 1950's and early 60's involve aspects of painting, collage, construction and assemblage. And so it becomes difficult to decipher one from the other. If obsolescence is a planned and accepted part of artistic activity we can encounter change and even look forward to it.

Current Directions

Present manifestations of collage, construction and assemblage can be found in the painting, sculpture, environments and happenings of the 1960's.

A hybrid of contemporary "Hard Edge" painting is the structured or shaped canvas. Artists including Charles Hinman and Lee Bontecou make use of simple and complex frameworks upon which they present their usually large and intriguing 2 1/2 dimensional works. Hinman generally paints with acrylics in a hard edge manner using flat areas of intense color applied to pronounced shaped canvases. In speaking of his concept of design and interest in structure, Hinman states:

> My painting begins with an idea of how the object may be constructed and the notion that the structure can be beautiful in itself.
>
> Particularly important is the taut membrane-like quality of the stretched canvas, and that the canvas hides the structure. The screen of the convoluted surface of the painting suggests a special relationship not easily defined in terms of geometry.[1]

Sculptress Lee Bontecou, also working in that nebulous area between painting and sculpture, uses a completely different approach than Hinman. Bontecou's work in comparison is far more expressive and organic, making use of tattered and scanned bits of old canvas. Using an underlying welded metal framework or skeleton she creates huge and mysterious spacial projections, recessions and voids by securing the muted pieces of canvas to the frame.

A recent development in American art, termed "Minimal," involves a simple, factual report glorifying the minimum or near nothingness. Sometimes referred to as the "Primary" movement, many young painters, sculptors, dancers and composers are concerning themselves with a blandness that is also purity. Such painters as Larry Zox, Frank Stella, and Jo Baer, sculptors Robert Morris, Donald Judd, Anne Truitt, and Carl Andre, composer John Cage and dancers Yvonne Rainer and Merce Cunningham are considered important figures in this new movement.

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[1]James A. Schinneller, Art/Search and Self-Discovery (Scranton, Pa.: International Textbook Co., 1968), p. 232.

Two recent forms to emerge around a situation or event, environments and happenings, seem to be alternatives to those who are looking for a new way of working that avoids the limitations and restrictions of traditional painting.

Environments involve a calculated and ordered spacial arrangement in which the spectator-participant involves himself in a sometimes ordered, often manipulative, situation or act. The environmental artist concerns himself with a reaction to a given or undetermined set of tolerances which he thrusts upon the viewer. Often the participant is encouraged to change the given set of circumstances to suit his own visual and tactile appetite.

Similar to environments, happenings also involve a spectator who is often one of the players acting or creating a mood in a manner not unlike that of "action" painting. It is like a movie set which has not yet seen action. The participant is required to follow a set pattern of activity or is free to do whatever the situation seems to demand.

CHAPTER III

PERSONAL PERSUASION: 1961 THROUGH 1965

Experiments in Paint

It seems logical from the standpoint of the professional art educator that an artist's technical and aesthetic training should begin with drawing and then painting in the traditional sense. Being a product of such a philosophy it seems that any discussion of my current work is incomplete without a brief retrospective look at my early attempts at painting.

The years 1961-63 were almost completely devoted to experiments in paint. Of the many paintings completed in that time only one or two major examples remain; the others have been too insignificant to retain and have therefore been destroyed. EMBROYNIC FORM-1963 is a prime example of my early interest in watercolor and the abstract effects that can be achieved through a variety of techniques. The hazy or atmospheric quality was derived in two ways: first the wet into wet technique of paint application and second the process of allowing the moist surface to freeze and thaw intermittently. Although the painting was conceived in a relatively short period of time, the forms underwent

considerable change in the working process. The limited palette of red, yellow and orange was augmented with black by adding areas of India ink just before the painting was dry. Upon close examination the

Fig. 1.--EMBROYNIC FORM-1963

watercolor 31 x 23"
private collection

crystalline-like shapes reminiscent of snow flakes and formed by the repeated freeze and thaw of the paint and paper are quite visible. The title "Embroynic Form-1963" was arrived at because of the obvious suggestion of an embryo coupled with the fact that my first son was born shortly after it was completed.

The organic references in "Embroynic Form" began to fade first into a type of hard edge social commentary (if labels are necessary) and then into total abstraction as early as late 1963-64. The painting "Thou Hath Spoken" (not illustrated), a large oil and acrylic, was one of a series using words or portions of words and symbols. The five-by-seven-foot canvas was simply conceived by superimposing the symbol for the word "and" (&) in combination with "etc.," resulting in "& etc." The picture was a reflection of my political thinking of the time (however naive) and summarized my thoughts regarding the incessant babbling of politicians and patriotic idiots.

In 1964 a growing dissatisfaction with the process of paint application led me to investigate other means more stimulating and tangible to strengthen my visual style. I found it difficult to disengage my forms from the comfortable resting place on the wall. Total sculpture seemed too radical a departure, although the physicalness and manipulative possibilities sculpture presented were far more complex and stimulating than painting.

Much of the work from 1964 to late 1966 is characterized by a

concern for old rustic materials, assembled or combined in a painstaking manner. My interest in organic materials manifested itself in a series of collages and constructions usually made of battered wood, rusting metal, scraps of cloth and various papers ranging from tattered billboard posters to pages of old books or magazines. At the time I was reluctant to accept any material that did not reflect abuse by nature or man.

UNTITLED RELIEF/COLLAGE is an excellent example of my romance with materials and objects of pioneer heritage. Originally both the upper and lower sections were covered with the plaster imbedded strips of lattice that now constitute the bottom only. The strips of lattice were arbitrarily cut and then carefully fitted together to contrast their size, shape, color and texture. The upper section is overlayed with decaying sheets of steel and a remnant of burlap. The composition is intended to be non-objective, although the image may suggest the reality of a battered fence or the mystery of a forbidding landscape.

In collecting materials for my assemblages and constructions, I discovered a dilapidated old schoolbus resting beside a well-traveled highway gathering posters advertising carnivals and county fairs. I carefully peeled the remaining segments and stored them in a corner of my studio not knowing how they might prove useful. One day while considering their potential I noticed that what I had assumed

Fig. 2.--UNTITLED RELIEF/COLLAGE (1964)

Assemblage 36 x 27"
private collection

to be a single piece was really an accumulation of several summers' promotion.

Working on a light-table I cut and peeled layer after layer, uncovering a network of patterns made up of letters and fractions of numbers. UNTITLED/RED was one of a series of small collages made in 1965 using this technique. Once the final composition was arrived at, glue was slipped under the ragged edges to laminate the layers and prevent further decay.

Fig. 3.--UNTITLED/RED (1965)

Collage 19 x 19"
private collection

The accumulated experiences of collage and assemblage allowed me a freedom of selection and composition that I had not experienced in painting. I continued working in this manner making a number of collages in the manner of Schwitters feeling a similar romance with found objects and materials.

CHAPTER IV

RECENT WORK: 1966 TO PRESENT

Continuation of Construction and Assemblage

> As soon as we start putting our thoughts into words and sentences, everything gets disordered.[1]
>
> --Marcel Duchamp

Coming to Grand Forks in the late summer of 1966 signaled the beginning of an intense and productive working period for me. Although I still feel that I work sporadically, the imposed discipline of the past two years has greatly increased my appetite for producing art.

The transition to Grand Forks did not manifest itself in immediate nor radical changes in my aesthetic viewpoint. I continued my former interest with found objects and materials working with resources brought from Milwaukee including, boxes of awning canvas, bundles of lath and assorted objects such as a rusted lawnmower housing and an antiquated electric beer sign. Much as before, I was primarily concerned with a relationship between used objects and materials by integrating the nostalgic appeal of those objects with a more meaningful and

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[1] Calvin Thompkins, "Not Seen and/or Less Seen," The New Yorker, February 6, 1965, p. 56.

contemporary approach to visual presentation.

A great majority of the American public places infinite value on preserving various items of heritage that may or may not have significance for them. Witness the antique family photo albums, pieces of clothing and commemorative dinnerware that have been passed on from generation to generation in an attempt to retain a feeling of empathy for the time, the place, or the person. My interest in the materials I was using was in effect an attempt on my part to caress or romance a feeling for time and materials that I no longer considered relevant in an age when men were contemplating trips to outer space.

There is a certain beauty in the weather beaten characteristic of a decayed canvas or piece of wood as well as a reference to a time, a place or an event. It was almost as if I felt obligated to preserve certain kinds of things for which I felt an attraction and relate them to a more contemporary frame of reference.

In LOVE GAME FOR A CHILDPERSON (Dedicated to Robert) I used a rusted lawnmower housing along with sections of striped and textured awning canvas to create a feeling or mood which to me signifies "love." Love is, of course, an all encompassing word which enters into the titles of a vast majority of my work. In this particular piece it is valuable to know something about the title and the reason for the existence of the piece itself. The upper section, comprised of the lawnmower housing and a target-like circle of striped canvas,

illustrates the isolated feeling a man can have in relation to the people surrounding him, offering, if not their love a strong feeling of devotion. I find this feeling of loneliness in the midst of a crowd to be a highly

Fig. 4.--LOVE GAME FOR A CHILDPERSON
(Dedicated to Robert) 1966

Assemblage 71 x 27 x 4"
Collection the artist

sobering and depressing experience. The turned wooden knobs enclosed in the Plexiglas window along with the activity of the diagonal stripes signify this feeling as well as the aspect of a child's game. The title is directly related to a friend of mine, poet Robert Hillebrand who wrote a love poem to his wife speaking of the delightful attitude a child displays in the creation of a sandcastle or for that matter any other form that he might make or construct with care and dignity. One fine summer's day while "muckin' around" with Bob and my son Randy we discovered the rusting lawnmower part discarded by its owner and left to the discretion of the elements. We had uncovered a "friend" and not knowing what to do with it we offered it our "love" by rescuing it. The act of salvaging the object parallels the childperson's love of life and uninhibited approach to the creative process.

Scale rapidly became a major element of the "paintings" I produced in Grand Forks. Not only because of my respect for scale itself, but because of the magnitude of my concern for contemporary society's tendency to categorize and label human beings without serious concern for their true feelings or individual preferences.

LOVE WALL FOR AN UNKNOWN GIRL is in a sense a retarded piece insofar as it reverts to an appearance similar to that of "Untitled Relief/Collage" done in 1964. It is a facade of crumbling components advertising the need or desire for sympathetic companionship and understanding in a time of crisis. The complexity of its structure

reflects the need of constant reassurance and desire for lasting and meaningful love. In terms of actual construction it is one of many

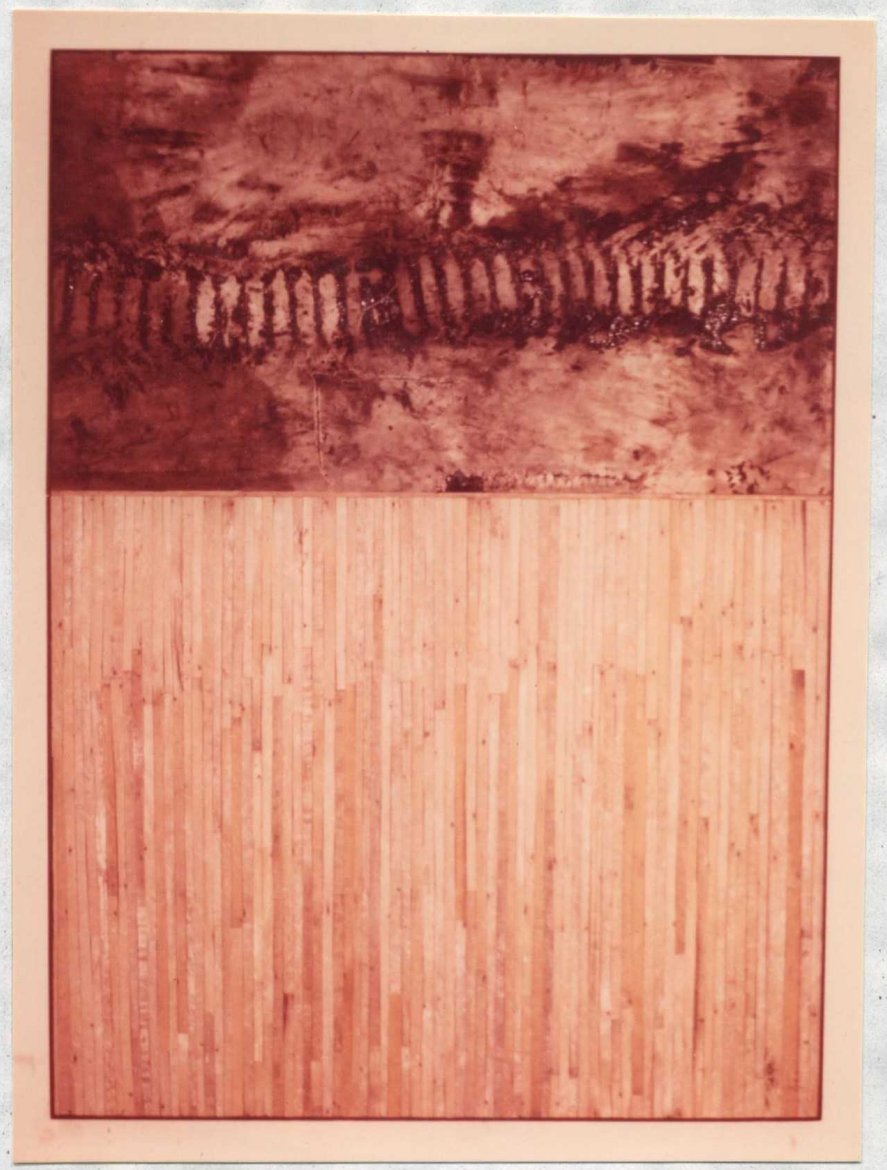

Fig. 5.--LOVE WALL FOR AN UNKNOWN GIRL (1966)

Assemblage 81 x 60"
Collection the artist

pieces made in two or more sections, combined not only for the purposes of easy handling and movement, but to emphasize the coming together of multiple souls united in a single committed cause.

The bottom section of plaster imbedded lath gives way to a topographic road map of tar and torn canvas pointing the way for heart-sick lovers. It is a significant piece not only because of its visual stature, but because it begins to signal a break with my commitment to the kinds of materials that it is made of. The process of seeking out used materials was rapidly becoming tedious for me and I became increasingly impatient with the time spent looking in scrap yards and demolished buildings. It seemed inadequate to depend on a method of presentation that relied on materials alone.

WHITE HELICOPTER is one of the first pieces that begins to incorporate sections that were fabricated either by myself or someone else under my instructions. The top section (again a piece made in multiple sections and then joined) is as much a found object as the sections in previous works, the difference being that the bottom was painstakingly constructed by fitting strips of lattice together, laying one flat and the alternate one on edge. In this combination of new and old I was attempting to juxtapose not only the visual elements involved, but the conflict between good and evil and innocence versus guilt or immorality (i.e. the weather beaten railing of the upper section contrasting with the purity and severity of the lower portion). The

introduction of a partial negative or break along the bottom edge is significant only insofar as it serves as a visual relief and point of interest in contrast with the regularity of the remainder of the piece.

Fig. 6.--WHITE HELICOPTER (1966)

Assemblage 71 x 69 x 4 1/2"

The title in this case has little reference to the intent of the construction and is meant only as a poetic interpretation of the visual statement.

YELLOW IS THE COLOR OF MY DEAD BIRDS TAIL is one of the major pieces produced in this period not only in terms of the end result but in reference to the time and labor involved. It had its beginnings as do most of my assemblage-constructions with the discovery of a single object which in turn triggers the entire composition. "Yellow Bird" is a unique piece in relationship to most of my other work insofar as the end result was arrived at after many drawings were made in an effort to attain the proper scale and correlation between the whole and its parts.

The number three becomes a recurring theme in much of my work and the symbolism in this piece revolves around the three boxes of equal size, one housing the neon number 3 (and therefore emphasized) and the two plexiglas enclosed center panels or boxes circumvented with mirrors. The center boxes each contain a white plywood panel upon which a prism-like mirror and a series of shaped wooden knobs are seated. The knobs project through openings in the plexiglas and symbolize the male-female relationship. The number 3 and the repetition of that number in the boxes is involved in the presence of the "other woman" in a marriage of two people. The use of reds throughout (barely visible in the neon 3 in the illustration) emphasizes

the discomfort of the situation. The other areas of awning canvas are primarily visual elements that help to unite the composition as well as restate the third woman (or man as the case may be) theme.

Fig. 7.--YELLOW IS THE COLOR OF MY DEAD BIRDS TAIL (1966-67)

Assemblage-Construction 66 1/2 x 63 1/2 x 8"
Collection Milwaukee Art Center

Technically speaking, the piece is of sturdy construction and uses a variety of materials in an attempt to assemble a situation resembling painting without using paint as a major element.

The title in this case is not of great significance and is merely a phrase of syncopated words meant to correlate with the visual pattern established by the harmony of elements.

While it may appear to the casual viewer that KINGS POST is unrelated to the main body of my work, I consider it to be a logical and significant development.

Designed and constructed within the requirement that it be a free standing structure, "Kings Post" becomes my first serious attempt at sculpture. The use of awning canvas as an actual awning is, I think, a rational outcome of the previous uses I had made of that material. The painted plywood structure from which the awning hangs is in hard opposition to the softness of the unrestrained canvas. It is, on the one hand, severe, restrained and impersonal and at the same time informal and full of suggestive freedom. Much like "White Helicopter" it contrasts the old and the new, the found object and the man-made structure, but basically it is abstract and concerned with color and form rather than image or idea.

In a series of small print-constructions done shortly after "Kings Post," I continued to explore the awning as awning idea. The imagery of these prints was, I felt far too literal, however, they are interesting

enough in themselves to be subjects for more extensive development at a later date.

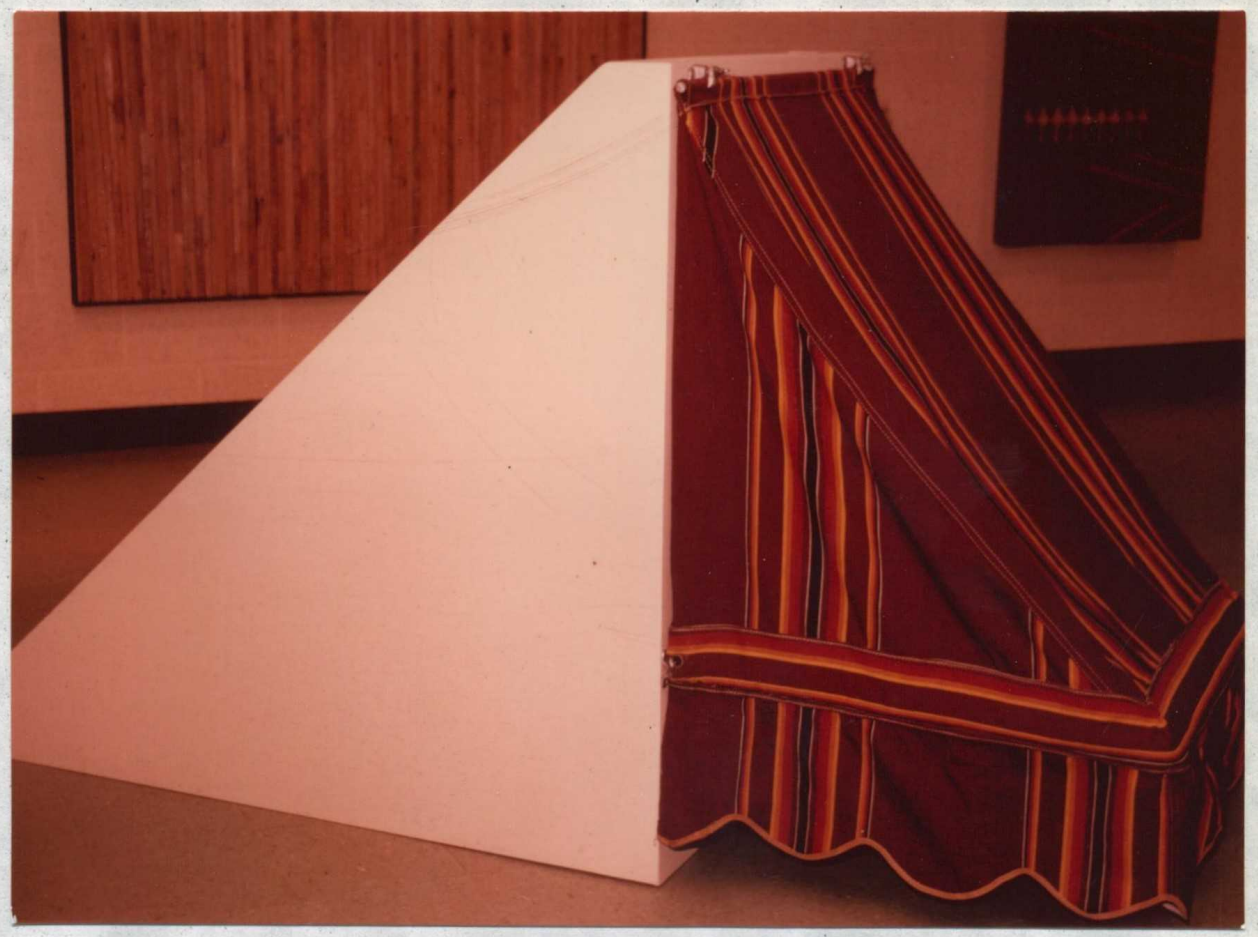

Fig. 8.--KINGS POST (1967)

Construction 41 x 30 x 73"
Collection the artist

Light Constructions and Vinyl Structures

The Love Signal series that was inaugurated with two neon and fluorescent light pieces included in my 1967 show at the University of North Dakota marked the first time that light in itself became a serious and meaningful element in my work. Although I had made two earlier

pieces using light, "Isabelle's Trophy" in the late summer of 1966 and "Yellow is the Color of My Dead Birds Tail," their light sources were

Fig. 9.--LOVE SIGNAL 1 (1967)

Light Construction 79 1/2 x 27 1/2 x 9"

secondary in comparison to the new works.

LOVE SIGNAL 1 is a severe and dignified work that combines aspects of assemblage and construction as well as painted area. While there are implied meanings in the Love Signal series the intent is far more calculated and impersonal than in previous works. If an over-riding theme is present it revolves around the sexual impulse involving men and women and the complicated physical and emotional pressures that accompany such a relationship. They are "love objects" insofar as they are objects of my affection.

"Love Signal 1 and 2" (since destroyed) were again built around the discovery of a single object, in this case the section of white neon tubing mounted on a similar plywood projection circled by black wooden pole-ends. The aspect of man and woman is further exemplified by the strong phallic-like vertical fluorescent light in the lower section pointing to the obvious female references in the top portion.

The shaped vinyl pieces that I was working on in relation to the Love Signal series were initiated from an idea that in part should be credited to my cohort, James Weeks, who had used a half kiss in a work of his that was never completely realized. The impetus for the first "Silver Kiss" (not illustrated) was my discovery of a silver vinyl material in a local fabric shop coupled with the inspiration derived from Week's work.

As is often the case in my work I started backwards by making

the larger compositions first and then working down to the models, which in a logical sense would have come first. Hence, the multiple edition of the "Little Kiss" was the last of the shaped structures using the silver material which is no longer available.

SILVER KISSES uses the repetitive image of the single kiss four times to create a composition within a square. While it is quite easy to rationalize a meaning behind these works it is important for the

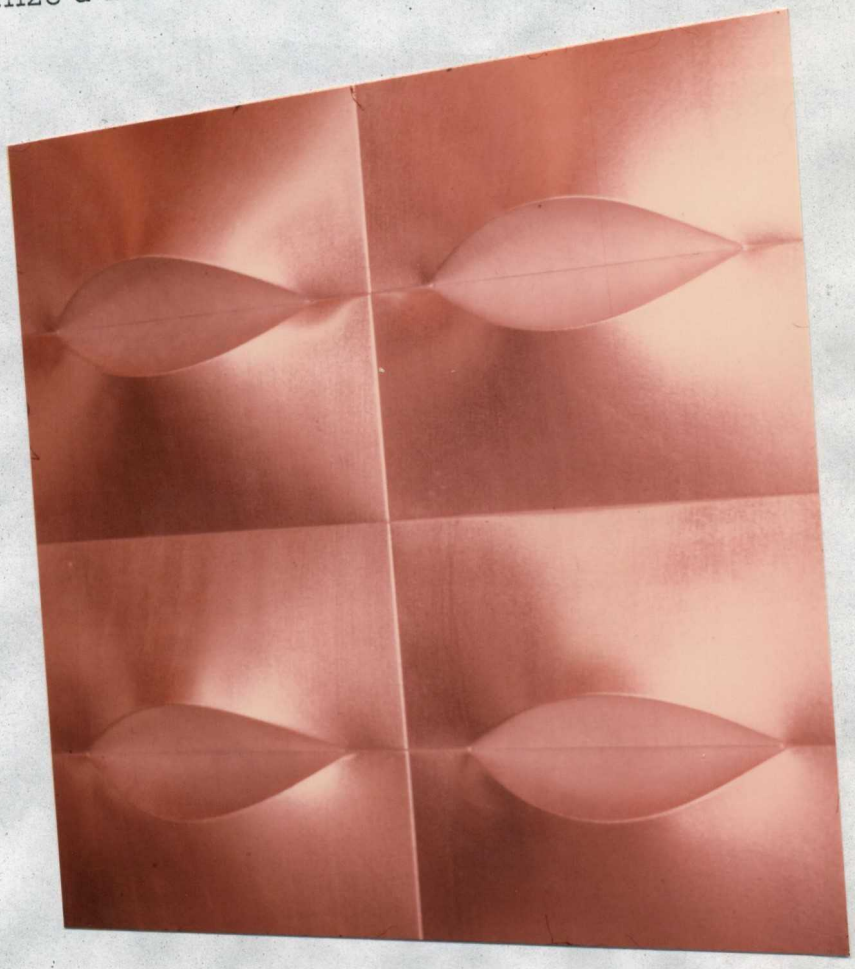

Fig. 10.--SILVER KISSES (1967)

Vinyl structure 44 x 44"
Private collection

viewer to understand that their purpose is not that of literal storytelling. They are rather intended to exist largely on a visual level and their appeal is therefore limited to the individual who can feel a similar empathy either with the materials, the color and form or the method of presentation. While my ideas may appear to be "minimal" they are in reality quite complex in structure and statement and far too involved to be completely satisfying for me. I would like to reduce them to the

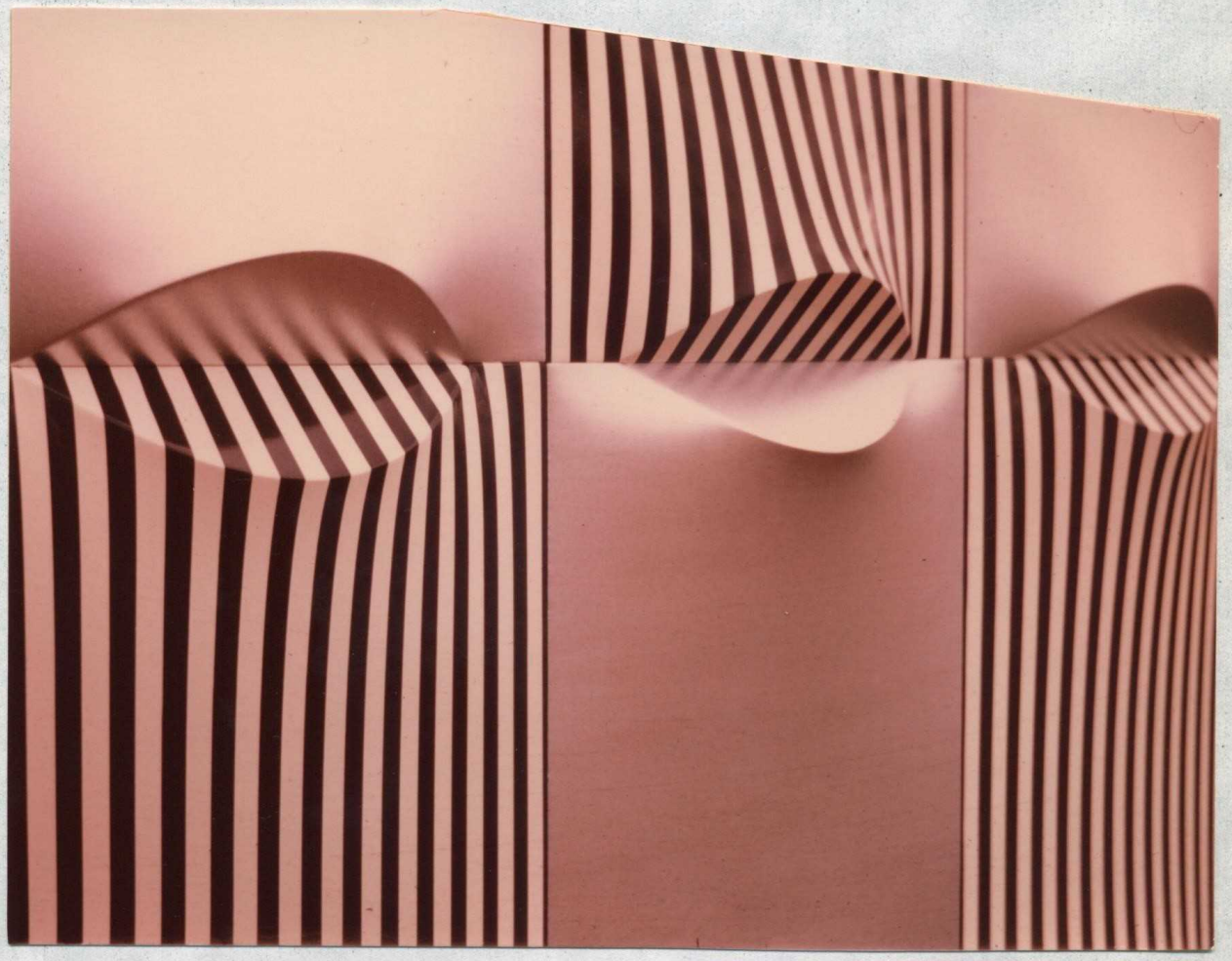

Fig. 11.--BLACK WINGED ANGEL-detail (1967)

Vinyl structure 58 x 66"

smallest possible number of elements and still retain a feeling of life and vitality.

In continuing the Love Signal series I became interested in the possibility of relating a wall piece to a piece resting on the floor. The plastic umbilical cord (dryer venting tube) which connects the upper and lower sections in Love Signals 3, 4, 5 and 6 strengthens the male-female relationship as well as introduces the aspect of mother and child.

In these works I was attempting to visually relate the light source to the structure of the piece by carefully integrating the color, intensity and kind of light with the type and degree of structure. In my estimation LOVE SIGNAL 4 is the most successful in this regard because of the complexity and interdependence of the wall and floor sections in relation to the colors involved and the placement and degree of light. The vinyl and neon wall piece is more than a simple rectangle or square and changes color, direction and pattern within the basic structure of a single kiss format. The U-shaped floor box echos the suggestive qualities of the entire theme and reflects as well as projects the floating neon tubes.

In some of the other pieces I feel the failure to relate light and structure is due to the fact that I have never fully explored neon above and beyond its use as a commercial advertising device. The neon as I have used it to this point is almost a superficial element resting above

the surface of either Formica or vinyl and it never becomes truly integrated. The way in which the light is presented is so direct and severe that it is difficult for the eye to assimilate its full and total impact.

Fig. 12.--LOVE SIGNAL 4 (1967)

Light construction 67 x 40 x 30"
Collection the artist

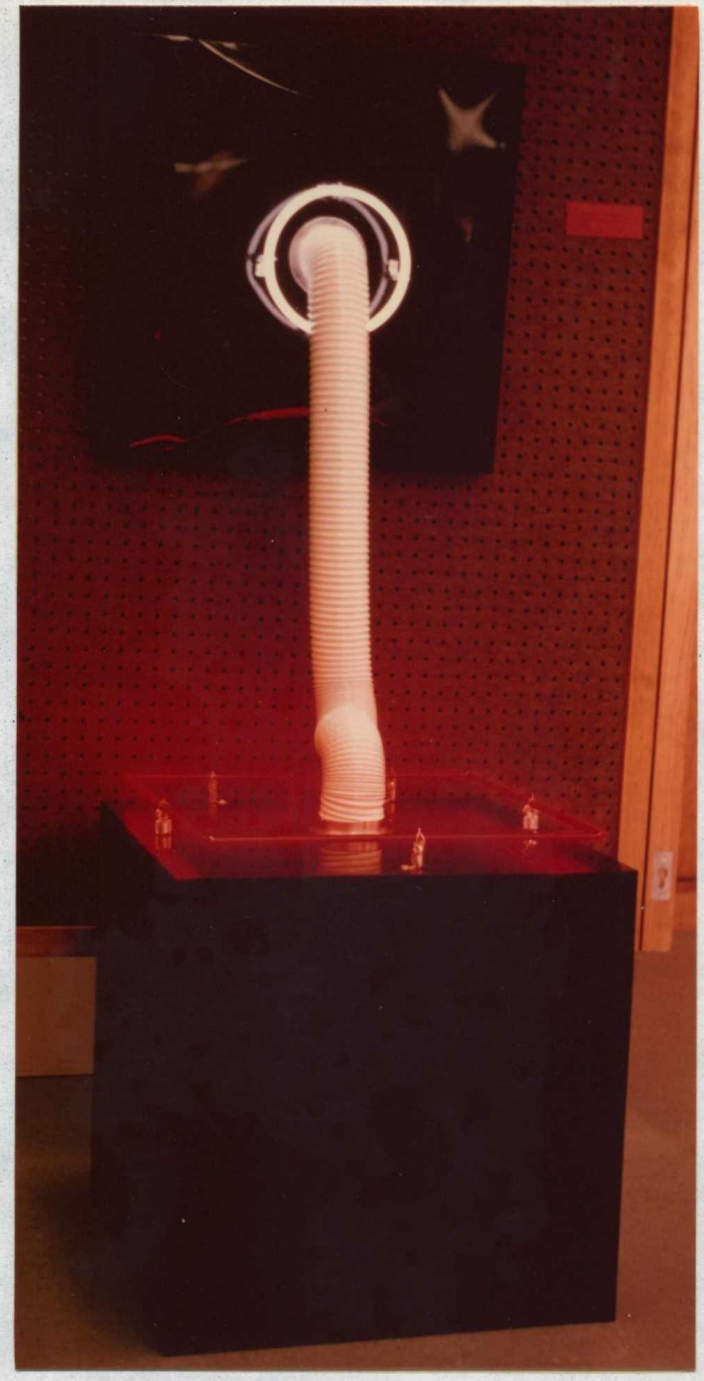

Fig. 13.--LOVE SIGNAL 5 (second state) 1967

Light construction 60 x 22 x 27"

LOVE CHEST 1 is a Formica box which when opened reveals a spaghetti-like network of silver-green neon tubing and the reflection of that tubing in a mirror housed within the cover of the box. Built on

Fig. 14.--LOVE CHEST 1 (1968)

Light box construction 12 1/2 x 17 x 17"

the principle of a "hope chest" the neon and its reflected image give promise of the pleasures and delights of expectant "love." "Love Chest 1" was a test piece for a series of boxes that were to house various neon symbols and designs. Although that series has never materialized, probably because of the immediate failure of the model, the idea remains and someday may be completed.

LOVE SIGNAL 6 is the largest and most complex of the series and uses for the first time a memory device or flasher to control an ordered rhythm of pulsating lights . . . DARK . . . two end units ON . . . middle unit ON (all ON) . . . two end units OFF . . . middle unit OFF (all OFF) . . . DARK. The sequence, although not originally intended as such, reiterates the suggestion of a "third" party. The middle section remaining lit the longest indicates that it is the only survivor of such an arrangement. The plastic umbilical cord emphasizes the mother and child, male to female relationship as well as carries the wiring from the wall section to the floor box.

The vinyl pieces that I have made were done not only because I like the hard-soft feeling they produce but as an alternative to the bulky and fragile qualities of the neon pieces. BLACK MUSHROOM, is I think, one of the most satisfying pieces in the series primarily because of its sensuous undulating black surface. It was intended to hang as a wall piece in its original state, however as the piece neared completion it became evident that it could be seated on the floor as well.

Fig. 15.--LOVE SIGNAL 6 (1968)

Light construction 60 x 108 x 27"

In my thesis exhibition "Black Mushroom" was set on the floor in front of the hanging piece "Cherry," although both were meant to function as separate ideas. Because of this method of placement it has become difficult for me to conceive of the two pieces as being separate. Had the idea occurred to me sooner I might have considered surfacing the entire gallery floor with shaped vinyl sections allowing the viewer to wander along narrow pathways in an environmental situation.

Fig. 16.--BLACK MUSHROOM (larger)-1968

Vinyl 88 x 88 x 5"

BLUE CONDITION and LOVE PYRAMID, the last two works that I will discuss, are important as they will probably be the last in the series of modular vinyl structures. Based on the geometry of an equilateral triangle both pieces are the outcome of the original kiss motif.

"Blue Condition" is basically made-up of 24 separate triangles that are bolted together forming four hexagons, three blue in color and one white. The white section floats slightly above the blue creating a

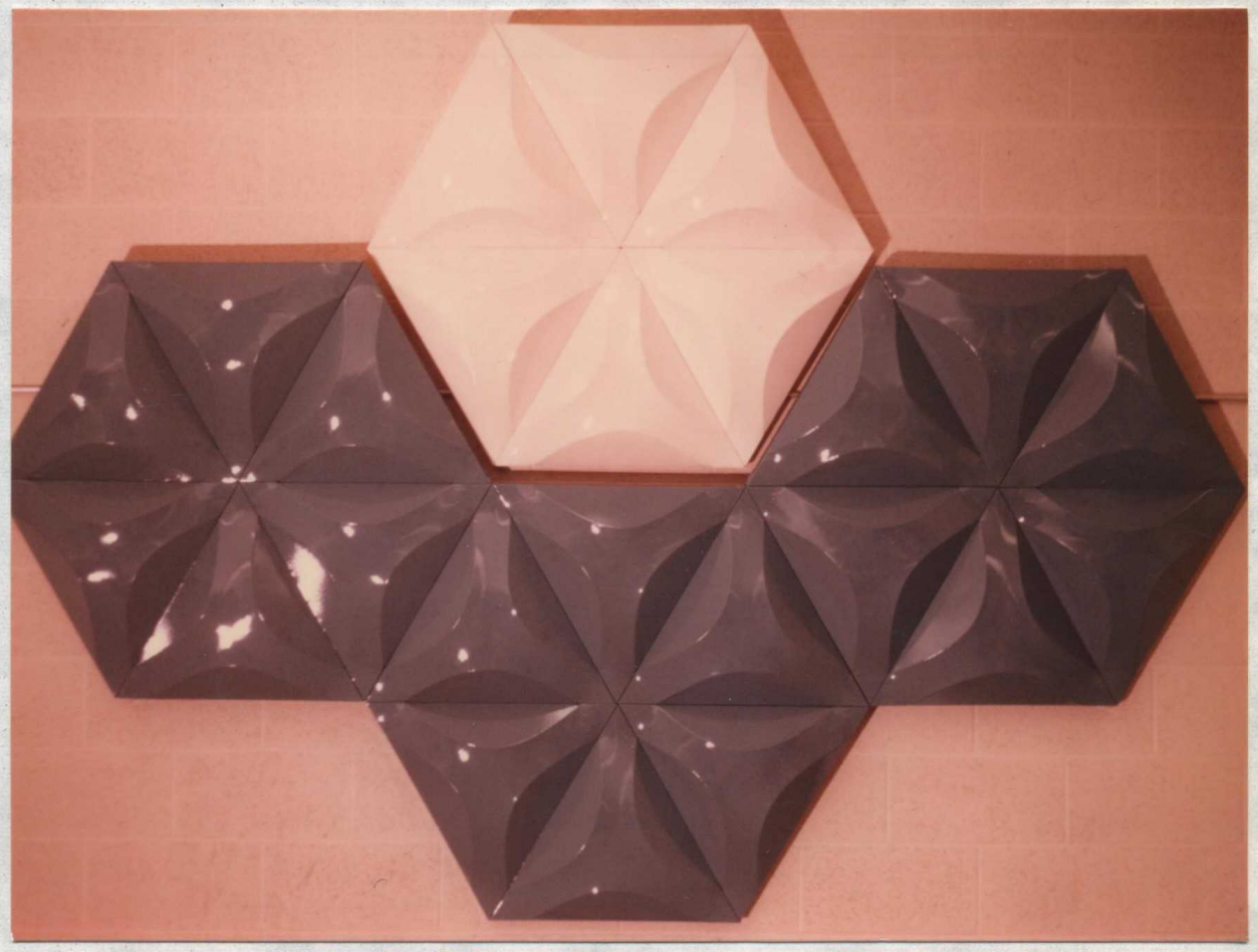

Fig. 17.--BLUE CONDITION (1968)

Vinyl 78 x 110 x 5"

condition of isolation and separateness which heightens the dramatic effect present in the proper lighting situation. The six sided forms are a multiplication of the ever present "two is company, three's a crowd" symbolism which, as I have stated before, repeats itself in much of my work. The play of light and glossy surface of the lip-like structures

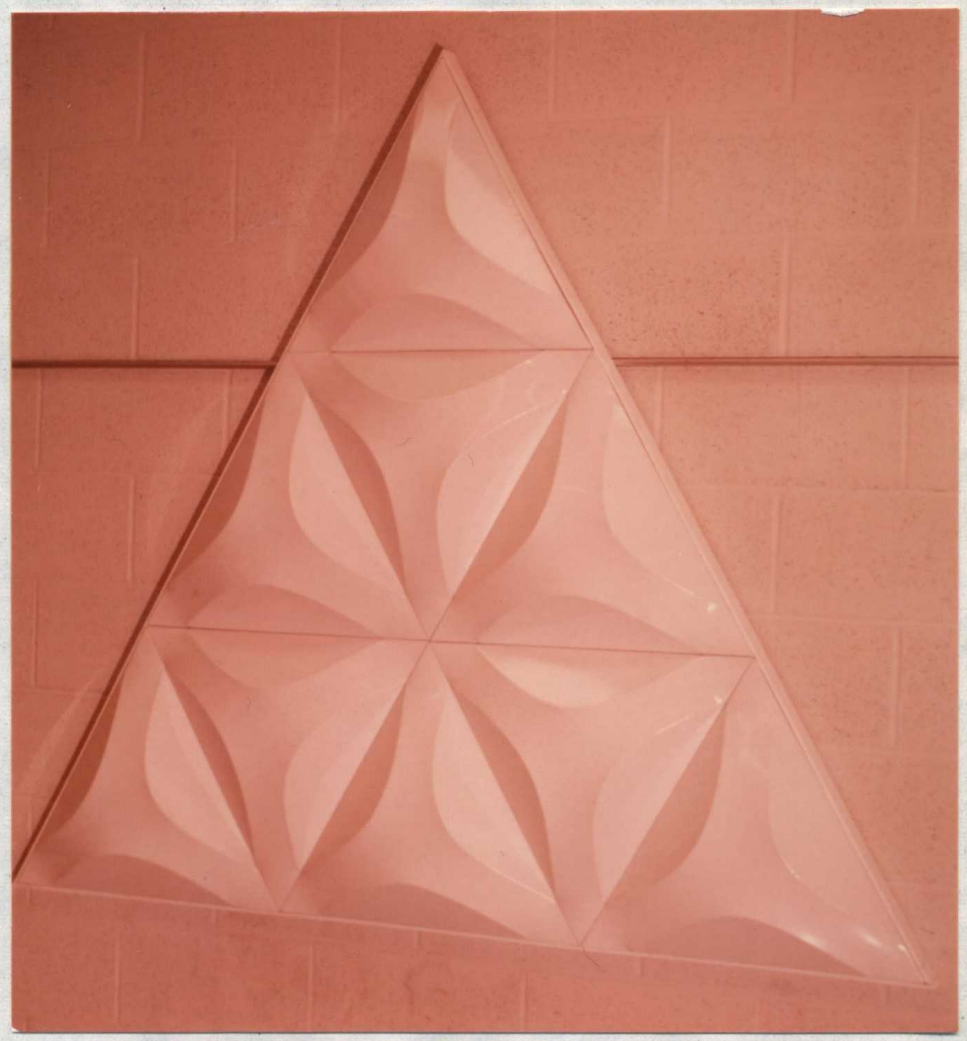

Fig. 18.--LOVE PYRAMID (1968)

Vinyl 58" high.
Private collection

and the vinyl material become an important visual element. Inspiration for a piece like this comes from considering the many possibilities and variations that occur by combining the original triangles.

"Love Pyramid" is just another variation on the theme of the love triangle. The basic hexagon is altered by adding a triangle to the top and ends creating an equilateral triangle. Another element of my work present in this piece which I have not mentioned is the aspect of formal balance or frontality. The only explanation I can offer for working in this manner is the feeling I have for design and presentation which best manifests itself in a highly formal situation. This, as well as many of my other feelings, cannot be adequately described in words.

2 1/2 Dimensional.Graphics and Multiples

I have purposefully left until last any discussion of my work in printmaking or multiples because I consider both to be areas of minor involvement for me.

Printmaking has always been something less than satisfying for me principally because of its qualities of indirectness and lack of tangible structure. Only in the last year or so have I been able to invent a way in which I can combine my interest in structure with the process of silk-screening and still have a creditable result. To be entirely honest the foremost reason that I have entertained either printmaking or multiple editions was to reduce the scale of my ideas

to the point where they could be considered saleable as well as small enough to exhibit conveniently. With the decline of significant painting and sculpture exhibitions around the country, coupled with the fragile quality and scale of my present work, it seems only reasonable that any artist concerned with showing his work has to become involved with a form small enough to ship conveniently and inexpensively.

By using the industrial process of vacuum forming polystyrene in combination with silk-screening I have been able to produce prints with plastic sections which are something more than flat or 2-dimensional and not as pronounced as the word 3-dimensional indicates, hence the term 2 1/2 dimensional. Actually the implication is quite significant if one realizes that an important group of today's artists are turning to graphics as a serious and inventive form of expression. Many prints and drawings are now assuming various aspects of structure by incorporating undulating surfaces, areas of college or novel materials by actually extending the flat surface into prints with three, four and even more sides. Prints which can be folded or manipulated by the spectator are becoming more prevalent and acceptable in exhibitions around the country.

I have been using a process that combines a printed pattern that accepts the pre-formed plastic sections set into pre-cut openings. These sections, as well as the printed surface itself, are geometrical

and non-objective in nature. All of the prints in the "Medium Message" series to this point have been printed on stiff backed silver foil paper in editions of 10 and 15. The titles may indicate that the prints are only concerned with exploiting a medium, however they are more involved and personal than that. Possibly a copy of Marshall McLuhan's "The Medium is the Message" was too close at hand when a title for the series was arrived at.

The concept of making multiple objects in quantity, allows the artist the opportunity to spread his personal imagery to a far wider audience and at a reduced cost to the buyer. Because a major segment of my work is usually large and fragile it has become necessary for me to consider working in this manner as well. The multiple editions that I have made to this date have been small scale vinyl structures produced in limited editions of three or four. I should like to expand upon the processes and concepts involved in both the 2 1/2 dimensional prints and multiple editions in the future.

CONCLUSIONS

Art which depends on light for lighting has begun to establish itself as an important movement in twentieth century art. With all of its technical devices and complicated programming it has already destroyed numerous conventions of the past. The many artists currently working with light have established that as a medium, light art or luminism, although still in an infant stage, must be considered a wholly new aesthetic experience. As a movement it is engaged with an excitement which goes beyond theory in its beauty and impact. It is, however, much more than a spectacle or technical circus. It is a far deeper involvement. Although the medium, because of its own existence, may appear to be the message, there are artists who are trying to work the medium as a message into a message with extensive implications. Still in an experimental stage, the art of light and structure is rapidly becoming a completely new medium of communication.

The art of light and structure is, of necessity, involved with industrial processes and technology. To oppose technology in art is to oppose it in life, for technology is as much a part of man as his home or his clothes. People who regard technology in art to be dehumanizing or even non-human, are prejudiced and ignorant of art history. There

is nothing inherently superficial in a neon tube or a Formica box, it is man alone who reduces material to the level of gimmickry. Technology is neutral and the artist is still dealing with something far more mysterious than mere technical invention. Artists have always employed new tools and knowledge, and the factory now offers him a new instrument for creative freedom and expression.

My personal work to this point has only touched lightly upon the implications and significance of light as a new medium. My attitude concerning the found object coupled with an increased awareness of the inherent beauty of electric light and structure as both a medium and a message have stimulated a series of new concepts. My work will continue to be characterized by a preoccupation with an exacting technique and finish. However, the spectator will also be dealing with problems of greater perception requiring more careful contemplation.

The new work, some of which will be a continuation of recent ideas and discoveries, will, to a large extent withhold much of its content, revealing it only by degrees to the viewer. I intend to explore the concept of modular sections and progression using various materials including Plexiglas, fiberglass, and vinyl as well as awnings and electric light. The readymade or found object will continue to give way to the commercially produced or manufactured item. It is also possible that the context of my present work (particularly my thesis exhibition) will lead to a total constructed environment using various forms of light

art and structure.

Multiple art, or the concept of producing identical or nearly identical objects in large editions, has suddenly become a popular method of creating everyday art forms. Actually the multiple idea can be attributed to Marcel Duchamp, who in 1913, made an assisted readymade, "Bicycle Wheel." The idea of having art simply conceived or designed by the artist and produced by others under factory conditions can be traced as far back as 1922 and a series of paintings Moholy-Nagy ordered over the telephone.

More and more artists are becoming attracted to the industrial procedures and equipment that facilitate making objects in quantity. As the production of multiples increases, the use of new materials and methods is to the artist's advantage. These technological advances can lead him to new conceptions as well as an ever-widening band of patrons.

Within the framework of the multiple-original concept I intend to explore the production of 2 1/2 dimensional graphics incorporating plastic and vinyl sections as well as small structures and objects produced under the name of "The Art Machine."

In conclusion, I feel that I have gained an identity in the last two years, I know who I am and what I stand for. That makes the future and all of its aesthetic challenges welcome.

APPENDIX I

STATEMENT

Throughout the history of art a surprising number of artists have demonstrated an uncanny ability to be exceedingly articulate about their own work as well as the work of their contemporaries.

Admittedly certain individuals have been granted the interest and ability to excel on both a visual and verbal level; they are, however, in the minority. It seems sacrilegious to expect a declared visual artist to be seriously involved in the creation of his own utterances.

The visual statement an artist makes should carry the major intrinsic value and essential emphasis, as it is only through the merit and persuasion of an artform that an artist can achieve and maintain significance.

My writing does not compare, in depth or originality, with my "painting," nor is it intended to. As a practicing artist it is my desire to contribute on a visual level; therefore the most significant and authoritative statements I make will be in the guise of the artforms I produce.

APPENDIX II

A CHRONOLOGY OF LIGHT ART BY:

WILLOUGHBY SHARP

LUMINISM: A Chronology of Light Art

by Willoughby Sharp

YEARS	ENVIRONMENTAL	NATURAL	PROJECTED
1734		Castel *Clavessin Oculaire*	
1844	Jameson *Color Music*		
1870			
1877			
1880			
1895			
1905			
1912			
1915			
1919			
1920			
1921			
1922			Schwerdtfeger *Color Organ*
1923			Smith *Mutochrome*
1924			Lovstrom *Projector*
1925			Klein *Color Projector*
1926			
1927			Hausmann *Optophone*
1929	Gabo *Light Festival*		
1930			Moholy-Nagy *Light Display Machine*
1932			Pesánek *Color Harpsicord*
1933			
1934			Shamah *Visical Piano*
1935			Benthan *Light Console*
1938	Speer *Light Cathedral*		
1947			
1949	Fontana *Black Light Environment*		Vardanega *Illuminated Half-Sphere*
1951			
1953			Munari *Direct Projections*
1954			
1955			
1956			
1957	Klein *Blue Lights*	Tchia *Fireworks*	
1958		Klein *Fire Fountain*	
1959	Piene *Light Ballet*		
1960		Tinguely *Homage to New York*	Goodyear *Light Modulator*
1961	Zero *Festival*	Aubertin *Fire Disk*	Mari *Oggetto Luminoso*
1962			Dantu *Light Projections*
1963	Groupe de Recherche d'Art Visuel *Labyrinth*		Albrecht *Composition*
1964	Dvizdanje *Environment*		Biasi *Kinetic Space*
1965	von Graevenitz *Kinetic Wall*	von Soun *Falling Fire*	Rabkin *Hop-Scotch*
1966	Stafford *Environmental Machine*		Salvadori *Eclipse*
1967	Oster *Instant Self Shaography*		Tsai *Vibrations*

SCREENED	DIRECT	SPECTACLE	YEARS
			1734
			1844
Kastner *Pyrophone*			1870
Baimbridge *Instrument*			1877
Bishop *Color Organ*			1880
	Rimington *Mobile Color*		1895
Wilfred *Color Box*			1905
Hector *Color Organ*			1912
		Scriabin *Promethus*	1915
		Baranov-Rossiné *Optophone*	1919
Wilfred *Clavilux*			1920
Greenewalt *Color Organ*			1921
			1922
Hirschfeld-Mack *Reflected Light Plays*		Lissitzky *Spectacle Machinery*	1923
Barnes *Colored Light*	Bayer *Light Ball*		1924
		Schwabe-Hasait *Cyclorama*	1925
Laszlo *Piano-Colored Light*		Carol-Berard *Color Symphony*	1926
		Desmongel *Color Symphony*	1927
		Wilfred *Mobile Mural*	1929
			1930
			1932
Patterson *Electric Circuit*			1933
			1934
			1935
			1938
	Kosice *Light Relief*		1947
			1949
Palatnik *Cinechromatic Work*		Hoppe *Light Performances*	1951
		Schoffer *Luminodynamic Spectacle*	1953
Healey *Light Box*			1954
Malina *Jazz*	Agam *Light Painting*		1955
Calos *Luminous Painting*			1956
Boto *Luminated Liquid*			1957
Mack *Light Dynamo*			1958
Anceschi *Colored Structure*			1959
Livinus *Lumodynamic Machine*	Uecker *Light Disk*	Rot *Spectacle*	1960
Demarco *Light Vibrations*	Flavin *Icon*	Metzger *Light Destruction*	1961
Lassus *Ambiance*	Le Parc *Continuel Light*	Sidenius *Lumia Theatre*	1962
Garcia-Rossi *Luminous Box*	Raysse *J.M.*	USCO *Be-in*	1963
Tadlock *Kinetic Light Construction*	Berns *No. 1*	Muller *Machine M*	1964
Hogle *Dot Box*	Chryssa *Ampersand*	Paik *World Theatre*	1965
Boriani *P.H. Scope*	Antonakos *White Light Neon*	Cassen-Stern *Trips Festival*	1966
Reiback *Luminage Projector*	Williams *Light Hemisphere*	Alderoft *Infinity Machine*	1967

APPENDIX III

William Landwehr: Selected Exhibitions: 1967-1968

The following list of exhibitions is given as professional documentation which will in part substantiate the quality and quantity of the visual work produced in conjunction with this thesis.

One-Man Exhibitions:

Kenosha Public Museum, Kenosha, Wisconsin, 1967

Rourke Gallery, Moorhead, Minnesota, 1967

Bemidji State College, Bemidji, Minnesota, 1967

University of North Dakota, Grand Forks, 1967, 1968

Selected Group Exhibitions:

"The Art of Assemblage"
The Paine Art Center, Oshkosh, Wisconsin, 1967

Wisconsin Painters and Sculptors Membership Exhibition
Jewish Community Center, Milwaukee, Wisconsin, 1967

"University of North Dakota Art Faculty"
University of North Dakota, Grand Forks, 1967

"Recent Acquisitions"
Milwaukee Art Center, Milwaukee, Wisconsin, 1967-1968

"Exhibition for King Olav V of Norway"
Rourke Gallery, Moorhead, Minnesota, 1968

"5 North Dakota Artists"
North Dakota State University Memorial Union, Fargo, 1968

Competitive Exhibitions; Regional, National and International:

8th, 9th Red River Annual National Exhibition
Red River Art Center, Moorhead, Minnesota, 1967, 1968

11th North Dakota Annual National Print & Drawing Exhibition
University of North Dakota, Grand Forks, 1967

7th Annual Print and Drawing Exhibition
Olivet College, Olivet, Michigan, 1967

28th Wisconsin State Fair Exhibition
Milwaukee, Wisconsin, 1967

33rd Wisconsin Salon of Art
University of Wisconsin, Madison, 1967-68

2nd New Paltz Intercollegiate Exhibition
State University College, New Paltz, New York, 1968
(traveling throughout the United States, 1968-69)

Northwest Printmakers 39th International Exhibition
Seattle Art Museum Pavilion & Portland Art Museum, 1968

54th Annual Wisconsin Painters & Sculptors Exhibition
Milwaukee Art Center, Milwaukee, Wisconsin, 1968

3rd National Print and Drawing Exhibition 1968
Western Michigan University, Kalamazoo Institute of Arts

7th National Print Exhibition 1968
The Silvermine Guild of Artists, Inc., New Canaan, Conn.

1968 Albion College National Print & Drawing Exhibition
Albion College, Albion, Michigan
PURCHASE AWARD

4th Dulin National Print and Drawing Competition
Dulin Gallery of Art, Knoxville, Tennessee, 1968

GRAPHICS 1968 "Ultimate Concerns"
8th Annual National Exhibition of Drawing & Printmaking
Ohio University, Athens, Ohio

Fourth National Print Exhibition
Springfield College, Springfield, Massachusetts, 1968

5th Annual Jury Exhibition
Red River Exhibition 1968, Winnipeg, Manitoba Canada
HONORABLE MENTION

Work produced during this period was also added to the permanent collections of the following museums and institutions: Milwaukee Art Center, Milwaukee, Wisconsin; Kenosha Public Museum, Kenosha, Wisconsin; D & J Foundation, Milwaukee, Wisconsin; University of North Dakota, Grand Forks, North Dakota; Albion College, Albion, Michigan and numerous private collections throughout the United States.

In addition two major commissions were complete in 1968: (1) $2,500, Highway Department Building, State of North Dakota, Bismarck, North Dakota (with Robert A. Nelson) and (2) "Four Paintings for University Buildings," University of North Dakota, Grand Forks, North Dakota.

APPENDIX IV

CHECKLIST OF VISUAL THESIS EXHIBITION

Chester Fritz Library Gallery
May 13 Through June 2, 1968

In listing of dimensions, height precedes width precedes depth; works marked with an asterisk are illustrated in the manuscript.

*1. LOVE SIGNAL 4 1967
neon, Formica, polyvinyl
67 x 40 x 30"

*2. LOVE SIGNAL 5 (second state) 1967-68
neon, Formica, polyvinyl
60 x 22 x 27"

*3. LOVE SIGNAL 6 1968
programmed neon, Nevamar, polyvinyl
3 units, overall 60 x 108 x 27"

4. LOVE SIGNAL 7 1968
neon, polyvinyl, programmed light
63 x 66 1/2 x 44"

*5. BLUE CONDITION 1968
polyvinyl
78 x 110 x 5"

6. CHERRY 1968
polyvinyl
44 x 88 x 5"

*7. BLACK MUSHROOM (larger) 1968
polyvinyl
5 x 88 x 88"

8. VIRGIN FOREST 1968
polyvinyl
88 x 22 x 5"

*9. LOVE PYRAMID 1968
polyvinyl
equilateral triangle, 66" sides

*10. LOVE CHEST 1 1967
neon, Formica, mirror
open, 30 x 17 x 17"

11. MEDIUM MESSAGE 1 1967
silk screen, vacuum formed
polystyrene on backed silver foil
7/8 x 19 x 19"

12. MEDIUM MESSAGE 2 1967
silk screen, vacuum formed
polystyrene on backed silver foil
7/8 x 19 x 19"

13. MEDIUM MESSAGE 6 1968
silk screen, vacuum formed
polystyrene on backed silver foil
1 1/8 x 19 x 19"

14. LITTLE KISS 1967
polyvinyl edition of 3
22 x 22 x 5"

15. LITTLE RED KISS 1968
polyvinyl edition of 3
22 x 22 x 5"

16. CREAM PUFF 1968
polyvinyl edition of 3
19 1/4 x 33 x 5"

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